

from the end of the plunger and the needle is released from the projecting position so that the biasing element displaces the needle into the retracted position in the cavity.

46. The needle device according to claim 45 further comprising a needle retainer holding the needle in the projecting position against the bias of the biasing element.
47. The needle device according to claim 46, wherein said needle retainer comprises axially extending resilient fingers for retaining said needle in its projecting position in which the biasing element exerts an expansive force on the needle, and wherein upon forward movement of the plunger past said predetermined portion of the barrel the plunger abuts against said resilient fingers and spreads them resiliently outwardly to release the needle and enable the biasing element to move the needle into its retracted position.
48. The device according to claim 45 wherein the connection between the first connector and the second connector is a releasable connection.
49. The device according to claim 48 wherein the first and second connectors comprise mating threads.
50. The device according to claim 45 wherein the cover is severed from the rest of the plunger when a predetermined normal force is exerted on the rearward end of the plunger after the plunger is displaced into the terminal position.
51. A safety medical device, comprising:
a hollow barrel having a forward end and a first connector;
a needle having a sharpened tip operable between a projecting position and a retracted position in which the sharpened tip is retracted rearwardly;

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a plunger displaceable in the barrel to a forward position to provide an injection, said plunger comprising:
an internal cavity for receiving the needle in the retracted position; and
a cover on the end of the plunger covering the internal cavity,
a spring biasing the needle toward the retracted position;
a housing for receiving the spring and a portion of the needle when the needle is in the projecting position, wherein the housing comprises a second connector that is cooperable with the first connector to connect the housing, needle and spring to the barrel;
wherein, upon pushing the rearward end of the plunger forwardly after the plunger is in the forward position, the cover of the plunger is removed from the end of the plunger and the needle is released from the projecting position so that the biasing element displaces the needle into the retracted position in the cavity.

52. The needle device according to claim 51 further comprising a needle retainer holding the needle in the projecting position against the bias of the biasing element.
53. The needle device according to claim 52, wherein said needle retainer comprises axially extending resilient fingers for retaining said needle in its projecting position in which the biasing element exerts an expansive force on the needle, and wherein upon forward movement of the plunger past said predetermined portion of the barrel the plunger abuts against said resilient fingers and spreads them resiliently outwardly to release the needle and enable the biasing element to move the needle into its retracted position.
54. The device according to claim 51 wherein the connection between the first connector and the second connector is a releasable connection.

55. The device according to claim 54 wherein the first and second connectors comprise mating threads.
56. The device according to claim 51 wherein the cover is severed from the rest of the plunger when a predetermined normal force is exerted on the rearward end of the plunger after the plunger is displaced into the terminal position.
57. A method for injecting fluid, comprising the steps of:
- providing a medical device having a hollow housing having a first connector, a plunger displaceable within the housing, wherein the plunger has an internal cavity and a cover covering an opening to the cavity;
 - providing a needle, a spring connected with the needle, and a second connector cooperable with the first connector;
 - connecting the second connector to the first connector to attach the needle and spring to the housing while the spring is biasing the needle rearwardly;
 - filling the barrel with a quantity of medicinal fluid;
 - pushing the plunger forwardly within the housing to expel fluid from the housing through the needle;
 - removing the cover from the end of the plunger; and
 - retracting the needle into the cavity in the plunger after the cover is removed from the plunger.
58. The method of claim 57 comprising the step of locking the plunger to prevent relative displacement between the plunger and the housing after the needle is retracted.
59. The method of claim 57 wherein the first connector is a first threaded portion and the second connector is a second threaded portion and the step of

connecting comprises threading the first and second threaded portions together.

60. The method of claim 57 wherein the step of removing the cover comprises severing the cover, such that the cover is displaced into the housing during retraction of the needle.
61. The method of claim 57 comprising the steps of providing a holder for holding the needle in a projecting position against the bias of the spring, and the step of pushing on the rearward end of the plunger to release the needle from the holder so that the spring can retract the needle.
62. The method of claim 57 comprising the step of pushing forwardly on the rearward end of the plunger to release the needle so that the spring can retract the needle.
63. A method for injecting fluid, comprising the steps of:
- providing a medical device having a hollow housing having a first connector, a plunger displaceable within the housing, wherein the plunger has an internal cavity;
 - providing a needle assembly comprising a needle, a spring connected with the needle, and a hub having a second connector cooperable with the first connector;
 - connecting the second connector to the first connector to attach the needle assembly to the housing while the spring is biasing the needle rearwardly;
 - filling the barrel with a quantity of medicinal fluid;
 - pushing the plunger forwardly within the housing to expel fluid from the housing through the needle;

severing a portion of the plunger to provide access to the cavity; and retracting the needle into the cavity in the plunger after severing the portion of the plunger.

64. The method of claim 63 comprising the step of locking the plunger to prevent relative displacement between the plunger and the housing after the needle is retracted.
65. The method of claim 63 wherein the first connector is a first threaded portion and the second connector is a second threaded portion and the step of connecting comprises threading the first and second threaded portions together.
66. The method of claim 63 wherein the severed portion of the plunger is displaced into the housing during retraction of the needle.
67. The method of claim 63 wherein the needle assembly comprises a holder for holding the needle in a projecting position against the bias of the spring, and the method comprises the step of pushing on the rearward end of the plunger to release the needle from the holder so that the spring can retract the needle.
68. The method of claim 63 comprising the step of pushing forwardly on the rearward end of the plunger to release the needle so that the spring can retract the needle.

REMARKS

Applicants believe that the foregoing newly presented claims are patentable over the art of record and the art cited in the accompanying IDS. Additionally, enclosed is a terminal disclaimer with respect to U.S. Patent No.